Development Of Digital Based Flash Card Media On Thematic Learning In Ibtidaiyah Madrasah

**Diah Kesumawati[1], Mustafa Habib[2], Renni Ramadhani Lubis[3],
Yusda Novianti[4]**
STKIP Al Maksum Langkat
e-mail: renni.ramadhani.rr@gmail.com[3]

Abstract

This research is research and development. This study uses the Four D development model. The stages in the Four D development model are definition, design, development, and dissemination. However, in this study, the stages used were only up to the development stage. The subjects of this study were students of class II MIN 15 Langkat, totaling 24 people with details of 13 males and 11 females. The object of research is digital-based flashcard media. This study aims to develop digital-based flashcard media. The data collection instruments were interviews, observations, questionnaire validation, and student responses. From the results of the validation carried out by media experts, material experts, and linguists it was declared feasible.
Keywords: Media, Flashcard, Digital, Thematic Learning

Abstrak

Penelitian ini merupakan penelitian dan pengembangan. Penelitian ini menggunakan model pengembangan Four D. Tahapan dalam pengembangan model Four D adalah definisi, desain, pengembangan, dan diseminasi. Namun dalam penelitian ini tahapan yang digunakan hanya sampai pada tahap pengembangan. Subyek penelitian ini adalah siswa kelas II MIN 15 Langkat yang terdiri dari 24 orang dengan rincian 13 laki-laki dan 11 perempuan. Objek penelitian adalah media flashcard berbasis digital. Penelitian ini bertujuan untuk mengembangkan media flashcard berbasis digital. Instrumen pengumpulan data adalah wawancara, observasi, validasiangket, dan respon siswa. Dari hasil validasi yang dilakukan oleh ahli media, ahli materi, dan ahli bahasa dinyatakan layak.
Kata kunci: Media, Flashcard, Digital, Pembelajaran Tematik

Introduction

Opinion (Sirait, 2017) who said that education is a human right as well as a means to realize other human rights. As an enabling right, education is the main target by which adults and especially children who are economically and socially marginalized can lift themselves out of poverty.

Education will not run well if there is no contribution from the teachers. Teachers must be able to create a pleasant learning atmosphere for students.But the truththere is still a lack of use of learning media used by teachers in supportingCurrently, education in Indonesia is more advanced than in previous years. This has a positive impact on the people in Indonesia. Where many young people have received education. Not only from the elite, but also from the lower classes have received education. Education is the right of every person to increase his or her dignity (Perdana & Suswandari, 2021; Wiratman et al., 2021). This is in line with the learning process in schools, the use of learning media can at least make it easier for teachers to convey material and students' attention can be focused on learning. (Asia et al., 2021). Before starting learning, the teacher must prepare interesting media so that students are excited to take part in learning in class. (Utami et al., 2021) say that I Media is everything that can be used to channel messages so that it can stimulate the thoughts, feelings, actions, interests and attention of students in such a way that the teaching and learning process occurs in children. Media is a teaching aid that can be used to assist teaching and learning activities and has a function to clarify the intent of what is conveyed by the teacher, so as to achieve better learning objectives (Choirudin et al., 2021).

From the explanation above, it can be concluded that the media is a tool used to convey the message that the teacher wants to convey to students in order to achieve learning objectives.

Based on observations that have been made with class II teachers at MIN 15 Langkat, information was obtained that students are less interested in learning in class, this can be seen from students feeling bored when the teacher gives material, student learning outcomes are not good and low. This problem occurs because teachers have limitations in creating and using learning media in teaching and learning activities in the classroom. Seeing the problems that occur to teachers and students at MIN 15 Langkat, it is necessary to have an innovation, namely developing digital-based flashcard media.

Flashcard media is one of the media resulting from print technology (Utami et al., 2021). (Utami et al., 2021) revealed that flashcard media is a card that contains pictures or writings related to the concept. While Arsyad in (Utami et al., 2021) flashcards are small cards that contain pictures, text, or symbols that remind or direct students to something related to the picture.

(Utami et al., 2021) said that the advantages of flashcard learning media are (a) concrete, (b) images overcome the limitations of space and time, (c) can overcome our limitations, (d) can clarify problems, (e) cheap and easy to obtain. obtainable and easy to use without the need for special equipment.

Some research first of all, these are: (Andini et al., 2022) The use of flashcards affects the child's ability to recognize letters (Zuniati et al., 2021), (Simanjuntak, et al. 2021), (Kusumawati & Mariono, 2016) (Hidayat, 2022) says that flashcard media is worth using(Rachman, 2018)said that the use of flashcards had an effect on student learning outcomes.

Based on the description above, to overcome the problems of class II students of MIN 15 Langkat, researchers will develop digital-based flashcard media for thematic learning.Thematic learning is a learning approach that integrates various competencies from various subjects into various themes (Prime & Suswandari, 2021). Thematic learning in this study includes several subjects including Indonesian, Natural Science, Mathematics and SBDP.

Method

This research is research and development (research & development). The subjects of this study were students of class II MIN 15 Langkat, totaling 24 people. The object of research is digital-based flashcard media in thematic learning. This study uses the Four D development model. The stages in this study are as follows:

At the definition stage, this research will be carried out at MIN 15 Langkat. The subjects in this study were grade II students consisting of 24 students. The steps used in this stage are: the first step will be an analysis from start to finish. Where in this step will be analyzed to see the problems faced by students and teachers in thematic learning. Based on the observations that have been made by researchers to teachers and students of class II MIN 15 Langkat, information is obtained that: the media used by teachers and

students is not adequate, when viewed from the use of media in teaching and learning activities in the classroom. Based on the results of observations that have been made, researchers will develop digital-based flashcard media in thematic learning. The second step will be student analysis. In this step, student analysis will be carried out to find the problems faced by class II students of MIN 15 Langkat in thematic learning. Based on the results of observations that have been made, students are less interested in participating in classroom learning, students feel bored to participate in teaching and learning activities, because the teacher provides learning materials using the lecture method. This makes students not interested in participating in learning. Students want when participating in teaching and learning activities in class the use of learning media. So that students are more interested and active in participating in learning. In the third step, in this step, a task analysis will be carried out. In the task analysis, it will help determine the digital-based flashcard media to be developed. Based on the results of the analysis obtained an overview of the tasks required in the learning process that is adjusted to the indicators. The fourth step is the specification of learning objectives. In this step, the learning objectives will be adjusted to the basic competencies in the 2013 curriculum. The learning objectives that will be generated are students are able to find concepts in thematic learning.

At the design stage, this will consist of several steps, namely: the preparation of a benchmark reference test which is the initial stage that connects the define stage and the design stage, the test is arranged based on the results of the formulation of learning objectives, the selection of learning media in accordance with the objectives of delivering learning materials. Format selection, initial design where there will be learning activities developed.

At the development stage, the product to be developed is a digital-based flashcard in thematic learning. The steps in this stage are: expert validation, to determine the feasibility of digital based flashcard media using certain criteria. Which will be validated by linguists, media experts, and materials experts. Flashcard media will be revised according to the direction and advice of experts. Product trials, data that have been validated by experts will then be analyzed, after which revisions will be made. After the product is declared feasible, the product will be tested on students. Student response questionnaire about the feasibility of digital-based flashcard media in thematic learning consists of 10 assessment items.

At this stage of socialization (dissemination), the use of digital based flashcard media in the thematic learning developed will then be distributed to school principals, teachers and grade II students of MIN 15 Langkat.

The data collection instruments in this study were observations, interviews, validation questionnaires including linguists, media experts, media experts, and student responses. Data analysis techniques to measure the feasibility of data using a Likert scale which will be explained in table 1 below:

Table 1 Category of Validation Assessment

No	Category	Score
1	Very suitable	4
2	In accordance with the	3
3	It is not in accordance with	2
4	Very inappropriate	1

(Saskia et al., 2019)

Table 2 Digital Based Flashcard Validity Category

No	Score	Category
1	81% - 100%	Very Worthy
2	61% - 80%	Worthy
3	41% - 60%	Decent enough
4	21% - 40%	not feasible
5	0% - 20%	Not feasible

(Nisa et al., 2020)

Then to calculate the percentage of flashcard media scores in the thematic learning developed, the following formula will be used:the following way:

$$V = s / [n(c-)]$$ (Nabila et al., 2021)

Information:
S   : r- Io
io   : the lowest value of the validity assessment (in this case = 1)
C   : lowest validity assessment score (in this case = 4)
R   : the number given by the evaluator

The formula for calculating the percentage of student responses is:

$$P = \frac{\sum(seluruh\ skor\ jawab\ angket)}{n\ x\ tertinggi\ x\ jumlah\ responden} x\ 100\%$$ (Nabila et al., 2021)

Information:
P   : state the rating percentage
n   : states the number of questionnaire items

Result

The results of research on the development of digital based flashcard media in thematic learning of class II students of MIN 15 Langkat which have been validated by experts can be seen in the explanation below:

The results of the validation of the quality components of digital based flashcard media materials in thematic learning are presented in table 3 below:

Table 3 Results of Expert Assessment of Digital Based Flashcard Materials

No	Component	Total score	Percentage (%)	Classification Validity	Eligibility Classification
1	Indonesian Language Material	63	96.92	Very Valid	Very Worthy
2	Eligibility to Serve	58	89.32	Very Valid	Very Worthy
3	language	43	86.15	Very Valid	Very Worthy
	Intact	154	90.77	Very Valid	Very Worthy

Table 3. shows that the percentage score of the material expert validator assessment on the Indonesian language material sub component is 96.92, the presentation feasibility sub component is 89.32, and the linguistic sub component is 86.15. From the three sub components and the overall average score, the category is very valid. Suggestions and improvements from the validator have been improved and are feasible to use. So that the product developed, namely digital based flashcard media, is very feasible to be tested in the field.

The results of the validation of each component of the language quality of digital based flashcard media in thematic learning are presented in table 4 below:

Table 4 Digital Based Flashcard Linguist Assessment Results

No	Component	Total score	Percentage (%)	Classification Validity	Eligibility Classification
1	Language Usage	18	90.00	Legitimate	Worthy
2	Language Accuracy	19	95.00	Very Valid	Very Worthy
3	Student Development Suitability	15	75.00	Legitimate	Worthy
	Intact	52.00	86.66	Very Valid	Very Worthy

Table 4 shows that the percentage of scores obtained from the assessment of the language validator on the sub component of language use is90.00, language accuracy sub-component 95.00, and student development suitability sub-component 75.00. From

the three sub components and the overall average score, the category is very valid. Suggestions and improvements from the validator have been improved and are feasible to use. So that the product developed, namely digital-based flashcard media, is very feasible to be tested in the field.

The results of the validation of each component on the quality of digital based flashcard media experts in thematic learning are presented in table 5 below:

Table 5 Digital Based Flashcard Media Expert Assessment Results

No	Component	Total score	Percentage (%)	Classification Validity	Eligibility Classification
1	Module Size	6	75.00	Legitimate	Worthy
2	Module Cover Design	18	75.00	Legitimate	Worthy
3	Module Content Design	62	88.66	Legitimate	Worthy
	Intact	86.00	79.55	Legitimate	Worthy

The results of student responses to digital based flashcard media in thematic learningfrom the student response questionnaire data, there are 24 students in class II MIN 15 Langkat. The results of students' responses to the media digital based flashcards in thematic learning can be seen in the table below:

Table 6 Student Response Questionnaire

No	Statement	Total Score	PR (%)
1	This digital based flashcard media makes me happy to learn it.	90	91.67
2	Presentation of material in digital based flashcard media starts from easy to difficult and from concrete to abstract.	91	89.58
3	This digital based flashcard media raises questions that prompt me to think.	97	96.88
4	Presentation of material in digital based flashcard media encouraged me to discuss with other friends.	90	89.58
5	This digital based flashcard media material piqued my curiosity.	91	91.67
6	This digital based flashcard media contains formative tests that can test the extent of my understanding of thematic learning materials.	91	90.63
7	The language used is simple and easy to understand	88	87.50
8	Using this digital based flashcard media makes me more enthusiastic about learning.	87	87.50
9	The display of this digital based flashcard media is interesting.	94	94.79
10	Using this digital based flashcard media can make learning about thematic learning not boring.	92	91.67
	Average	87.5	91.15

Table 6 shows that the average PRS of students who gave a positive response who answered "Yes" to each questionnaire statement using digital based flashcard media in thematic learning was 91.15% or as many as 24 students in class II MIN 15 Langkat. From the average figures above, it can be concluded that the learning objectives have been achieved.

Discussion

In research on the development of digital based flashcard media, researchers will divide it into several sub-chapters which will be explained below:

Research on digital based flashcard media has passed the validation stage. Where this digital based flashcard media has been validated by linguists, media experts, and material experts. Suggestions and revisions that have been given by the three experts have been revised by researchers. And after being revised by the researcher, the results of the validation carried out by the three experts stated that digital-based flashcard media was suitable for use by grade II students of MIN 15 Langkat.

After the digital based flashcard media was created, testing was carried out on class II students of MIN 15 Langkat. And from the results of the trials that have been carried out, it can be seen that there is an increase in student learning outcomes towards the use of digital based flashcard media in thematic learning. After the student response questionnaire was given to all 24 students of class 2 MIN 15 Langkat, it can be seen from the student response questionnaire that students' responses to digital-based flashcard media were very good.

From the discussion above, there are several opinions that are in line with this research, namely: digital flashcards used in the learning process can attract students' interest, make students actively involved in the learning process and can increase student interest in learning so that learning objectives are achieved (Syahputri et al., 2021). (Winangun, 2020) said that this flashcard is very good, because children will get to know various types of animals and plants that are around them, not animals and plants that are rarely encountered so that early age children who cannot think abstractly must of course be assisted with pictures and similar environments or even similar. (Nurcahyani, 2020) said that using flash card media can improve pronunciation, communication in English properly and correctly. (Sustainable & Karsono, 2020) said that the results of this study were for Indonesian language learning activities, namely improving reading comprehension skills through flashcard media. (Angelica & Novitasari, 2020) said that the resource-based learning model (RBL) based on flashcards had an effect on problem-solving abilities and student motivation. (Suryani, 2020) said that the validation results of media experts got an average percentage of % with the "Very Eligible" criteria. The results of material expert validation get a percentage of 93.33% with the "Very Eligible" criteria. The results of the educator's assessment response get the final result with a percentage of 87.5% with the "Very Eligible" criteria. (Fatayan dkk., 2022) showed that the visual flashcard media in science learning that had been made based on student assessments on the software aspect was 88% with very good assessment criteria, 89% material aspects with very good assessment criteria, and 89% on visual communication aspects with very good assessment criteria. Very good assessment criteria. (Pramesti & Qamaria, 2022) said that as a result the subject became more curious than before with the flashcard media which made him interested so that

he was motivated to learn and his speaking and language skills were continuously honed.

With the research on the development of digital-based flashcard media, it is hoped that it can attract students' interest in thematic learning so that student learning outcomes increase, especially in class II MIN 15 Langkat.

Conclusion

This research and development produces digital based flashcard media products for science learning. The research and development will measure the feasibility of digital based flashcard media in science learning. This research was conducted to improve the learning outcomes of class II students inMIN 15 Langkat.

Reference

Andini, A. N., Pendidikan, J., Anak, I., Dini, U., Islam, U., Maulana, N., & Ibrahim, M. (2022). *Jurnal Penelitian Anak Usia Dini PENGARUH MEDIA FLASHCARD TERHADAP KEMAMPUAN*. *1*(1), 1–11.

Angelica, D., & Novitasari, A. (2020). The Influence of Resource-based Learning Model based on Flashcard toward Students' Problem-Solving Abilities. *Biosfer: Jurnal Tadris Biologi*, *11*(1), 78–85. https://doi.org/10.24042/biosfer.v11i1.4791

Asiah et all. (2021). Pengembangan Media Pembelajaran Ular Tangga Terhadap Kemampuan Pemahaman Konsep Peserta Didik Kelas V Pada Pembelajaran Tematik Terpadu Di SD/MI. *Jurnal Pendidikan Dan Pembelajaran Dasar*, *8*, 9–18.

Ayu Pramesti, A., & Suci Qamaria, R. (2022). Penerapan Komunikasi Terapeutik dengan Media Flash Card pada Anak yang Mengalami Down Syndrome. *PTK: Jurnal Tindakan Kelas*, *2*(2), 159–169. https://doi.org/10.53624/ptk.v2i2.92

Choirudin, C., Anwar, M. S., Azizah, I. N., Wawan, W., & Wahyudi, A. (2021). Pengembangan LKPD Matematika Berbasis Kaligrafi dengan Pendekatan Guided Discovery Learning. *Jurnal Pendidikan Matematika (JPM)*, *7*(1), 52. https://doi.org/10.33474/jpm.v7i1.6738

Dasar, G. S., Guru, P., Dasar, S., Guru, P., & Dasar, S. (2022). *PENGEMBANGAN MEDIA VISUAL FLASHCARD BERBASIS ADOBE*. *9*(1), 28–39.

Eva Betty Simanjutak, Gustini Siburian, M. F. N. (2021). Pengembangan Media Pembelajaran Flash Card Berbasis Teka-Teki Silang Pada Pembelajaran Tematik Kelas IV Sekolah Dasar. *Analisis Standar Pelayanan Minimal Pada Instalasi Rawat Jalan Di RSUD Kota Semarang*, *5*(2), 70–76.

Hidayat. (2022). Pengembangan Media Flashcard Untuk Meningkatkan Kosa Kata Bahasa Indonesia Pada Anak Usia Dini. *JOURNAL ON TEACHER EDUCATION*, *3*, 277–289.

Kusumawati, R., & Mariono, A. (2016). Pengembangan Media Flashcard Tema Binatang untuk Anak Kelompok B di Taman Kanak-kanak Asemjajar-Surabaya. *Teknologi*

Pendidikan, *4*(1), 24–32.

Lestari, W. E., & Karsono. (2020). Penggunaan Media Flashcard untuk Meningkatkan Keterampilan Membaca Pemahaman Peserta Didik Kelas III Sekolah Dasar. *Jurnal Pendidikan Indonesia*, *6*(1), 70–75.

Nabila, S., Adha, I., & Febriandi, R. (2021). Pengembangan Media Pembelajaran Pop Up Book Berbasis Kearifan Lokal pada Pembelajaran Tematik di Sekolah Dasar. *Jurnal Basicedu*, *5*(5), 3928–3939.

Nisa, A. H., Mujib, M., & Putra, R. W. Y. (2020). Efektivitas E-Modul dengan Flip Pdf Professional Berbasis Gamifikasi Terhadap Siswa SMP. *Jurnal Pendidikan Matematika Raflesia*, *05*(02), 14–25.

Nurcahyani. (2020). *PENINGKATAN KETERAMPILAN BERBICARA BAHASA INGGRIS MELALUI MEDIA FLASH CARD SISWA KELAS 3 SDN PUTAT 02, GEGER, MADIUN TAHUN AJARAN 2019/2020*.

Penitipan, T., Tpa, A., Pahrul, Y., & Amalia, R. (2022). *JOTE Volume 3 Nomor 2 Tahun 2022 Halaman 31-42 JOURNAL ON TEACHER EDUCATION Research & Learning in Faculty of Education MENINGKATKAN KEMAMPUAN MOTORIK HALUS ANAK MELALUI KEGIATAN BERMAIN PLASTISIN PADA ANAK USIA 4-5 TAHUN DI Tujuan penelitian ini adalah u*. *3*, 31–42.

Perdana, R., & Suswandari, M. (2021). Literasi Numerasi Dalam Pembelajaran Tematik Siswa Kelas Atas Sekolah Dasar. *Absis: Mathematics Education Journal*, *3*(1), 9. https://doi.org/10.32585/absis.v3i1.1385

Peserta, K., Kelas, D., Pembelajaran, V. P., Terpadu, T., Sd, D., Asiah, N., Shawmi, A. N., Megantara, S., & Wibowo, D. R. (2021). *Pengembangan Media Pembelajaran Ular Tangga Terhadap Kemampuan Pemahaman PENDAHULUAN Pendidikan merupakan salah satu proses untuk mempengaruhi peserta didik agar peserta didik mampu menyesuaikan diri dengan lingkungnnya , dengan demikian akan membuat peru*. *8*(1), 9–18.

Rachman, T. (2018). Pengaruh Presepsi Penggunaan Model Pembelajaran Kooperatif Tipe Student Teams Achievement Divisions (STAD) Berbantuan Media Flash Card Terhadap Hasik Belajar Kelas IV di SDIT Badrussalam Kawadenan Magetan. *Angewandte Chemie International Edition, 6(11), 951–952.*, 10–27.

Saskia, I., Wulandari, E., & Viza, R. Y. (2019). Pengembangan Media Flash Card Filum Echinodermata dan Filum Porifera. *Biocolony*, *4*(1), 17–20.

Sirait, S. C. (2017). Tanggung Jawab Pemerintah Untuk Memberikan Pendidikan Kepada Anak Terlantar Dalam Perspektif Undang-Undang Perlindungan Anak. *De Lega Lata*, *2*(1), 158–182.

Suryani. (2020). *PENGEMBANGAN MEDIA FLASHCARDS BERBASIS QR-CODE PADA MATA PELAJARAN BAHASA INGGRIS MATERI PARTS OF BODY KELAS V*.

Utami, F., Rukiyah, R., & Andika, W. D. (2021). Pengembangan Media Flashcard Berbasis Augmented Reality pada Materi Mengenal Binatang Laut. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, *5*(2), 1718–1728. https://doi.org/10.31004/obsesi.v5i2.933

Winangun, I. M. A. (2020). Pengenalan Life Science Bagi Anak Usia Dini Melalui Media Flashcard Berkonten Lokal. *Widya Kumara:Jurnal Pendidikan Anak Usia Dini*, *1*(2), 80–89.

Wiratman, A., Widiyanto, B., & Fadli, M. (2021). Analisis Keterampilan Proses Sains Peserta Didik Madrasah Ibtidaiyah Pada Masa Pandemi Covid-19. *Bidayatuna: Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, *4*, 185–197. http://oasisinternationaljournal.org/journals/2

Zuniati, M., Ummah, M., Laili, N., Anwar, M. S., Agama, I., Ma, I., & Metro, I. (n.d.). *Pengembangan Media Flash Card Untuk Meningkatkan Keaktifan Belajar Siswa didik kurang aktif dalam proses pembelajaran , pendidik lebih banyak menjelaskan*.